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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

AVELLINO, JOSEPH E

ART UNIT PAPER NUMBER

2143

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/973,311	Applicant(s) TROVATO, KAREN I.	
	Examiner Joseph E. Avellino	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims **1-6, and 8-26** are pending in this application. The Office acknowledges the cancellation of claims 7, 27, and 28.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. **2003/0079222 A1**), hereinafter 'Boykin' in view of Li et al. (USPN 6,799,214) (hereinafter Li).

Regarding claim **1, 14**, Boykin taught a system for transmitting digital encoded data, comprising: associating each subset of data comprising the data set to a select IP address of a plurality of IP addresses (**from paragraph [0170] line 24 to paragraph [0171] line 7**), at least two of the subsets comprising the data set having different select IP addresses of the plurality of IP addresses (**fig. 34 and 35 paragraph [171 lines 1-7]**), and providing access to each subset of the data set via a request for the subset at the select IP address associated with the subset (**paragraph [0172] lines 17-30**). Boykin inherently taught the association of portions (segments **621**) of a file **620** with the IP address of the host (servers (see paragraph [0172] lines 15-17)) in a list that is

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provided the clients in order to enable the clients to "incast" the file (dataset) (paragraph [0172] lines 28-30).

Regarding claim **10 and 22**, Boykin taught a system for transmitting digital encoded data, comprising: selecting a first IP address that is associated with a first subset of the data set, requesting the first subset at the first IP address, selecting a second IP address that is associated with a second subset of the data set (**paragraph [0171] lines 1-7, 35-36 and in paragraph [0172] lines 47-49**), the second IP address being different from the first IP address, and requesting the second subset at the second IP address (**fig. 35 and paragraph [0172] lines 47-49**). See also, (**from paragraph [0170] line 24 to paragraph [0171] line 7, fig. 34 and 35, and paragraph [0172] lines 17-30**).

Boykin does not specifically disclose an indication of a current select IP address associated with a current subset of data is provided in response to a previous request for a previous subset of data. In analogous art, Li discloses another method of providing access to a data set wherein a response to the request for each subset includes an indication of a next IP address for a next subset of the data set (i.e. the file request is for Index.html, however all objects, obj1, obj2, and obj3 reside on different servers other than the current IP address, therefore the site which contains those objects is returned) (e.g. abstract; Figures 4-5). It would have been obvious to one of ordinary skill in the art to combine the teaching of Boykin with Li in order to allow a geographically dispersed system the ability to serve data with servers located close to

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the requestor, thereby reducing the number of components required to transfer the data as well as providing effective caching of resources.

Regarding claims **2, 11-12, 15 and 23-24**, Boykin taught communicating information to a client system that facilitates the determination of the select IP address for each subset in **paragraph [0172] lines 1-24**. Note, for example the following excerpts: a) "...returned to the client..." and b) "...the client will also receive..."

Regarding claim **3 and 16**, Boykin taught that the information is communicated to the client system via a secure communication (**paragraph [0124 and 0189]**). Note for example that Boykin taught the use of scrambled and encrypted communications.

Regarding claim **4 and 17**, Boykin taught providing access to each subset occurs via a first communication channel, and communicating the information to the client system occurs via a second communication channel (1136 to 1137) that differs from the first communication channel (1126 to 1125) (**fig. 48 and in paragraph [0194]**). Boykin explains how secured communication is used in the related art (**figs. 1-4 paragraph [0124 and 0189]**), concerned about security issues, Boykin taught an encryption processing section **5**, as one of the main elements of the prior art in paragraph **[0124]** that is later modified and incorporated into the preferred embodiments described in **figure 36, element 20** as a perceptual encryption block. Moreover, Boykin taught the existence of embodiments comprising plural communication channels **6 and 7**, wherein

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channel 7 is depicted to be used for authorization purposes related to a conditional access (see **fig. 1**).

Regarding claim **5, 13, 18 and 25**, Boykin taught associating each subset to the select IP address is based on a pseudo-random process that is initialized with a seed value, and the information that is communicated to the client system includes the seed value (**paragraph [0172] lines 17-35**). Note that the information provided to the client is commensurate with an initial information (seed) (**see line 25 in paragraph [0172]**) used to determine the additional servers that will be requested to serve the file segments, additionally the adaptive incasting algorithm that allow virtual segmentation that is dependent on "a number of factors" (**see lines 28-33 in paragraph [0172]**), therefore depicting a pseudo-random process, that is by definition based on random event but initiated with known information (seed).

Regarding claim **6 and 19**, Boykin taught that the information that is communicated to the client system is encrypted using a public-key system (**see paragraph [0171]**).

Regarding claim **7**, Boykin taught that the information communicated to the client system is within a prior subset of the data set that is communicated to the client system in response to a prior request (**paragraph [0171] lines 1-7 and paragraph [0172] lines 1-10**); wherein Boykin taught the transmission of data related to the file the client

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desires to download (attributes) prior the request for the segments **621** of the file **620** are executed.

Regarding claim **8, 20**, Boykin taught providing access to each subset via the request is dependent upon time duration from a prior request (**paragraph [0172] lines 30-46**); wherein Boykin taught the execution of further request as dependent on response time (fast/slow) of the servers (**paragraph [0172] line 40**).

Regarding claim **9, 21**, Boykin taught providing access to each subset via the request is dependent upon a frequency of occurrence of repeated requests for prior subsets of the data set (**paragraph [0172] lines 52-63**).

2. Claims 26-28 are rejected for similar reasons as stated above. Furthermore an index to a current IP address can be construed as returning the current IP address as expressed above, and it is inherent that any subset of data would include an addressing sequence, since all data must be able to be referenced to be accessible.

Response to Arguments

3. Applicants arguments dated March 20, 2006 have been fully considered but are not persuasive.

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4. In the remarks, Applicant argues, in substance, that (1) Boykin-Li do not disclose a response to the request for each subset includes an indication of a next IP address for a next subset of the data set.

5. As to point (1) Applicant is incorrect. Applicant is aware that the claims must be interpreted as broadly as possible. As such, the claim reads upon a response to the request for each subset (i.e. obj1-3) includes an indication of a next IP address (i.e. another site) for a next subset of the data set (i.e. "next subset of the data set" can be interpreted as "obj2" since obj1 is the first subset of data, the system requests the next object, and therefore is given the next IP address, which is the address to retrieve obj2). By this rationale, the claim is that within the response, at least two IP addresses are included, for the retrieval of at least two subsets of data. IN this case the response in Li includes the various sites to request the particular objects. By this rationale, the rejection is maintained.

Conclusion

If further prosecution on the merits of the instant application is pursued, Applicant is strongly encouraged to:

1. Elaborate the independent claims not only in the preamble, but also in the limitations, in order to better define the scope of the claimed invention, for example, a) including details regarding what element of the system

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performs the association steps and what are the steps of the association process, b) including details regarding the steps performed at the server side that enable the server to provide a second subset of a data set at the second select IP address, and c) clarify that the server system is configured to expect subsequent requests at the changed IP address and that the server system is a single server.

2. Incorporate into the independent claims the details of the instant claimed invention that are found in dependent claims that may help to differentiate the claimed invention from the prior art; for example: a) steps related to the determination/generation of the select IP address for each subset, b) steps related to the pseudo-random process, and c) the composition of the seed value).
3. Explain how the amended claims, if any, are particularly distinct from the cited prior art.

Applicant is further encouraged to point out where in the specifications is found the support for any future amendments to the claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEA

April 25, 2006



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